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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,594	07/15/2002	Michael Kagan	COLB-121 XX	9453
7590 10/18/2004			EXAMINER	
Dr. Mark Friedman Ltd. c/o Discovery Dispatch 9003 Florin Way Upper Marlboro, MD 20772			AUVE, GLENN ALLEN	
			ART UNIT	PAPER NUMBER
			2111	

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/070,594

Applicant(s)

KAGAN ET AL.

Examiner

Glenn A. Auve

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/8/02 & 4/11/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 31-33,36,37,51, and 52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5,12, and 13 of U.S. Patent No. 6,243,787 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of U.S. Patent No. 6,243,787 B1 contain every element of claims 31-33,36,37,51, and 52 of the instant application and as such anticipate claims 31-33,36,37,51, and 52 of the instant application.

3. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. *In re Longi*, 759 F.2d at 896, 225 USPQ at 651 (affirming holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); *In re Berg*, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus)." *ELI LILLY AND COMPANY v BARR LABORATORIES, INC.*, United States Court of Appeals for the Federal Circuit, ON PETITION FOR HEARING EN BANC (Decided: May 30, 2001).

4. The claims correspond to each other as follows:

APPLIC. CLAIM	PATENT CLAIM
31	1
32	2
33	3
36	4
37	5
51	12
52	13

The only differences in the claims are the use of the term "packet-switching network" in the patent claims, while the application claims use the term "a switched serial connection".

However, the application claims do recite that the data and interrupts are transmitted as packets over the switched serial connection. As such it is clear that the term used in the application claims describes a kind of packet-switching network as is claimed in the patented claims.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

~~The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.~~

6. Claims 28-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 is rejected based on lack of positive antecedent basis of "the host network interface" on the last line.

Claims 29-38 are rejected because they depend on claim 28.

Claim 38 is also rejected based on lack of positive antecedent basis of "the host network interface" on the last line.

Claim 39 is also rejected based on lack of positive antecedent basis of "the host network interface" on the last line.

Claims 40-48 are rejected because they depend on claim 39.

Claim 49 is rejected based on lack of positive antecedent basis of "the network" on line 9.

Claims 50-54 are rejected because they depend on claim 49.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 28,29,35,38-40,46,47,49, and 53 are rejected under 35 U.S.C. 102(e) as being

anticipated by Bailey et al., U.S. Pat. No. 6,295,573 B1.

As per claim 28, Bailey et al. (Bailey) shows a method for communication between a peripheral device (10) and a central processing unit (CPU) (12D), comprising: receiving data from the peripheral device for transmission to a memory (24D) associated with the CPU (;

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receiving an interrupt signal from the peripheral device peripheral device associated with the data; sending one or more data packets containing the data over a switched serial connection to a host interface serving the memory and the CPU; and sending an interrupt packet over switched serial connection the host interface, responsive which an interrupt input of the CPU is asserted only after the one more data packets have arrived at the host network interface (cols. 9-10, wherein data packets are transmitted from the I/O devices coupled to the I/O bridge and interrupt packets are also sent which indicate that data is being sent). Bailey shows all of the steps recited in claim 28.

As for claim 29, the argument for claim 28 applies. Bailey also shows that receiving the data comprises receiving parallel data over local bus from the peripheral device (col.9). Bailey shows all of the steps recited in claim 29.

As for claim 35, the argument for claim 28 applies. Bailey also shows receiving the data packets and the interrupt packet at the host interface; conveying the data in the packets for delivery to the memory over local bus coupling the host interface to the memory and the CPU; and notifying the CPU when all of the data have been conveyed (cols.6-7 and 9-10). Bailey shows all of the steps recited in claim 35.

As for claim 38, the argument for claim 35 applies. Bailey also shows that notifying the CPU comprises asserting the interrupt input of the CPU responsive to receiving the interrupt packet at the host network interface (col.6). Bailey shows all of the steps recited in claim 38.

As per claim 39, Bailey shows a communication apparatus, comprising: a serial interface (fig.2,I/O bridge interface), which is operative to receive data from a peripheral device (10) and to transmit the data in the form of one or more data packets via a switched serial connection to a host interface(28), for writing to a memory (24) associated with a central processing unit (CPU) (12) served by the host interface; and an interrupt processor (16), adapted to send an

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interrupt packet over the switched serial connection to the host interface to signal that the data have been transmitted, thus causing an interrupt input of the CPU to be asserted only after the one or more data packets have arrived at the host network interface (cols. 6-7 and 9-10). Bailey shows all of the elements recited in claim 39.

As for claim 40, the argument for claim 39 applies. Bailey also shows that the serial interface is adapted to receive the data from the peripheral device over a local parallel bus (col.9). Bailey shows all of the elements recited in claim 39.

As for claim 46, the argument for claim 39 applies. Bailey also shows that the host interface is coupled to receive the data and interrupt packets transmitted over the switched serial connection, and is operative to convey the data in the packets for delivery to the memory over a local bus coupled to the memory and the CPU and to notify the CPU when all of the data have been conveyed (cols. 6-7 and 9-10). Bailey shows all of the elements recited in claim 46.

As for claim 47, the argument for claim 46 applies. Bailey also shows that the host interface is coupled to assert the interrupt to the CPU responsive to the interrupt packet (cols. 6-7 and 9-10). Bailey shows all of the elements recited in claim 47.

As per claim 49, Bailey shows a communication apparatus, comprising: a host adapter, which operative to receive data packets transmitted over switched serial connection from a peripheral device, and to convey data from the packets for delivery to a memory associated with a CPU over a local bus that is coupled to the memory and the CPU, and further to receive an interrupt packet sent over the switched serial connection responsive to an interrupt signal asserted by the peripheral device after sending the data to the network; and a host interface processor, adapted, responsive to the interrupt packet, to notify the CPU when all of the data have been conveyed to the local bus (cols. 6-7 and 9-10 and fig. 2 as noted above). Bailey shows all of the elements recited in claim 49.

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As for claim 53, the argument for claim 49 applies. Bailey also shows that the host interface processor is coupled to assert the interrupt input of the CPU responsive to receipt of the interrupt packet by the host adapter (cols. 6-7 and 9-10). Bailey shows all of the elements recited in claim 53.

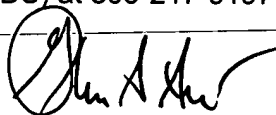
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other newly cited references show transmitting interrupt packets.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (571) 272-3623. The examiner can normally be reached on M-F 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn A. Auve
Primary Examiner
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